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Steinbrecher

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(54) **WATERWAY SHIELDING SYSTEM AND METHOD**

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(57) **ABSTRACT**

A waterway shield system comprises a plurality of autonomous underwater nodes wherein each underwater node comprises acoustic detectors which may comprise horizontal and/or vertical acoustic arrays which may be directly mounted thereto or extend outwardly therefrom. Each underwater node comprises an acoustic modem for transmitting high resolution acoustic data to a gateway node that provides a connection to a surface system and a network of other underwater nodes in other waterways. The data from the underwater nodes may be utilized to produce acoustic attribute data for hulls of ships in the waterways. An acoustic database is provided that compiles the predetermined acoustic attribute data for a variety of ships and other entities thereby providing previously stored identifying means. The acoustic database is utilized in conjunction with one or more databases of other physical attributes of ships or other objects to thereby provide an automated identification process.

20 Claims, 5 Drawing Sheets

